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UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No.	13DV-13810 (07783-0090)	
First Inventor	JOHNSON et al.	
Title	MISCHMETAL OXIDE TBC	, (
Express Mail Label No.	ER 635946135 US	

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b)) Mail Stop Patent Application APPLICATION ELEMENTS Commissioner for Patents ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 1. 🛛 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) (Submit an original and a duplicate for fee processing) 8. Nucleotide and/or Amino Acid Sequence Submission 2. Applicant claims small entity status. See 37 CFR 1.27. (if applicable, all necessary) a.

Computer Readable Form (CRF) з. 🔯 Specification [Total Pages (preferred arrangement set forth below) b. Specification Sequence Listing on: - Descriptive title of the Invention CD-ROM or CD-R (2 copies); or - Cross Reference to Related Applications ii. 🗌 Paper - Statement Regarding Fed sponsored R & D c. Statements verifying identity of above copies - Reference to sequence listing, a table, or a computer program listing appendix ACCOMPANYING APPLICATIONS PARTS - Background of the Invention 9. 🔲 Assignment Papers (cover sheet & document(s)) - Brief Summary of the Invention - Brief Description of the Drawings (if filed) 10. Power of 37 C.F.R. 3.73(b) Statement - Detailed Description (when there is an assignee) Attorney - Claim(s) - Abstract of the Disclosure 11. 🔲 English Translation Document (if applicable) Copies of IDS 12. 🔯 Information Disclosure Drawing(s) (35 U.S.C.113) [Total Sheets Citations Statement (IDS)/PTO-1449 [Total Sheets 5. Oath or Declaration 13. 🗍 **Preliminary Amendment** a. Newly executed (original or copy) 14. Return Receipt Postcard (MPEP 503) b. Copy from a prior application (37 CFR 1.63 (d)) (Should be specifically itemized) (for a continuation/divisional with Box 18 completed) Certified Copy of Priority Document(s) 15. 🔲 i. DELETION OF INVENTOR(S) (if foreign priority is claimed) Signed statement attached deleting inventor(s) 16. 🔲 Nonpublication Request under 35 U.S.C. 122 named in the prior application, see 37 CFR (b)(2)(B)(i). Applicant must attach form PTO/SB/35 1.63(d)(2) and 1.33(b). or its equivalent. 6. Application Data Sheet. See 37 CFR 1.76 17. Other: Certificate of Express Mailing 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: of prior application No: _ □ Continuation □ Divisional ☐ Continuation-in-part (CIP) Examiner Art Unit: Prior application information: For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS 31450 □ Customer Number Correspondence address below Name Address City State Zip Code Country Fax Telephone 48,483 Jonathan P. Miller Registration No. (Attorney/Agent) Name (Print/Type) Date March 3, 2004 Signature

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



FEE TRANSMITTAL for FY 2004						Complete if Known						
						Applica	Application Number					
							Filing Date		March	March 3, 2004		
TOT FY 2004							amed In	wootos				
Effective 10/01/2003. Patent fees are subject to annual revision.										JOHNSON et al.		
						Examiner Name			n/a			
Applicant claims small entity status. See 37 CFR 1.27						Art Un	it		n/a			
TOTAL AMOUNT OF PAYMENT (\$) 1068						Attorne	Attorney Docket No. 13DV-13810 (07783-0090)					
METHOD OF PAYMENT (check all that apply)						FEE CALCULATION (continued)						
☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None Order						3. ADDITIONAL FEES Large Entity Small Entity						
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Deposit						Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid	
Account	50-1059				1051	130	2051	65	Surcharge - late filing fee or oath			
Number						1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.		
Deposit						1053	130	1053	130	Non-English specification		
Account	McNees W	/allace 8	& Nurick LLC			1812	2,520	1812	2,520	For filing a request for reexamination		
Name The Director is au	thorized to	o: (che	ck all that a	apply)		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		
☐ Charge fee(s) indicated below ☐ Credit any overpayments ☐ Charge any additional fee(s) during the pendency of this application						1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		
☐ Charge fee(s) ir	ndicated be	low, ex	cept for th	ne filing fee		1251	110	2251	55	Extension for reply within first month		
to the above-identit						1252	420	2252	210	Extension for reply within second		
FEE CALCULATION						4050	250	2052	475	month	\vdash	
1. BASIC _I FI						1253 1254	950 1,480	2253 2254	740	Extension for reply within third month Extension for reply within fourth	-	
Large Entity Small Entity						1254	1,460	2254	740	month		
	ee Fee ode (\$)	<u>Fe</u>	e Descripti	<u>on</u>	Fee Paid	1255	2,010	2255	1,005	Extension for reply within fifth month		
	001 385	Uti	lity filing fee	. [770	1401	330	2401	165	Notice of Appeal		
	002 170		sign filing fe	-		1402	330	2402	165	Filing a brief in support of an appeal		
1003 530 20	_		1403	290	2403	145	Request for oral hearing					
					1451	1,510	1451	1,510	Petition to institute a public use proceeding			
1005 160 2005 80 Provisional filling fee					1452	110	2452	55	Petition to revive – unavoidable			
SUBTOTAL (1) (\$) 770							1,330	2453	665	Petition to revive – unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE							1,330	2501	665	Utility issue fee (or reissue)	\vdash	
2. EXTRA CLA	M FEES		_	ND REISS	Fee	1502	480	2502	240	Design issue fee		
			xtra Jaims	below	Paid	1503	640	2503	320	Plant issue fee		
Total Claims 27	-20 **	= 7		18	= 126	1460	130	1460	130	Petitions to the Commissioner	. ———	
Independent	-3 **	= 2	x	86	= 172	1807	50	1807	50	Processing fee under 37 CFR 1.17 (q) Submission of Information Disclosure	' 	
Claims 5		ئـا -	^		- 172	1806	180	1806	180	Stmt		
Multiple Dependent X = 0					8021	40	8021	40	Recording each patent assignment per property (times number of			
Large Entity	Small E	ntity				l		• • •		properties)		
Fee Fee Code (\$)	Fee Code	Fee (\$)	Fee Desc	ription		1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	'	
1202 18	2202	9	Claims in	excess of 20		1810	770	2810	385	For each additional invention to be		
1201 86	2201	43	Independe	ent claims in	excess of 3					examined (37 CFR § 1.129(b))		
1203 290	2203	4 45	-		im, if not paid	1801	770	2801	385	Request for Continued Examination (RCE)		
1204 86 2204 43 ** Reissue independent claims over		1802	900	1802	900	Request for expedited examination						
original patent "Reissue claims in excess of 20 and									of a design application			
1205 18 2205 9 Reissue claims in excess of 20 and over original patent												
						Other fee (specify)						
SUBTOTAL (2) (\$) 298						*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0						
ther number proviously said if greater. For Baissyon and shows												
**or number previously paid, if greater; For Reissues, see above												

Complete (if applicable) SUBMITTED BY Registration No. 717-237-5358 48,483 Telephone Jonathan P. Miller Name (Print/Type) (Attorney/Agent) March 3, 2004 Signature

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Included on this form. Provide credit Card Information and authorization on P10-2036.

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CERTIFICATE OF EXPRESS MAILING UNDER 37 C.F.R. 1.10

I hereby certify that the following documents are being deposited with the United States Postal Service Express Mail Post Office to Addressee service under 37 C.F.R. 1.10 on the date indicated below, Express Mail Label Number ER 635946135 US, dated March 3, 2004 and addressed to:

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

- 1. Return Acknowledgment Postcard
- Utility Patent Application Cover Sheet 2.
- Fee Transmittal Form 3.
- Patent Application (23 pages) 4.
- 5. Drawings (7 sheets)
- **Application Data Sheet**
- Information Disclosure Statement 7.
- 8. PTO/SB/08
- Copies of References Cited (8 Foreign) 9.

Dindsay Vim

By: (Type signature) Lindsay Vican

Written Signature: Date: March 3, 2004